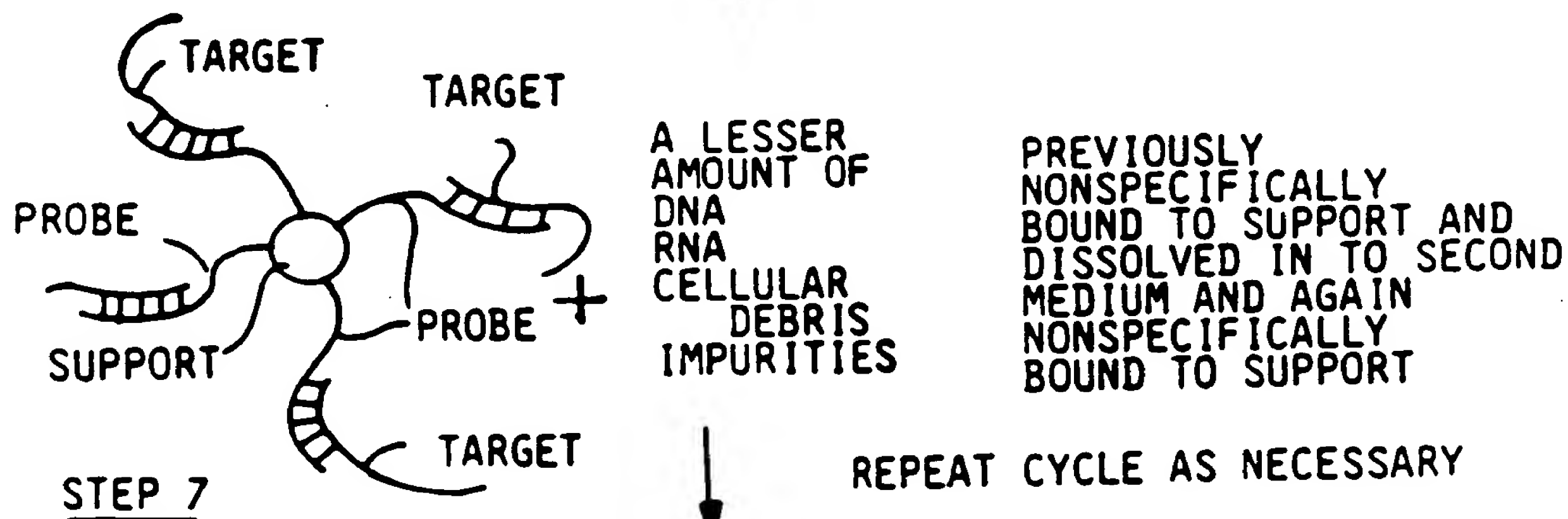
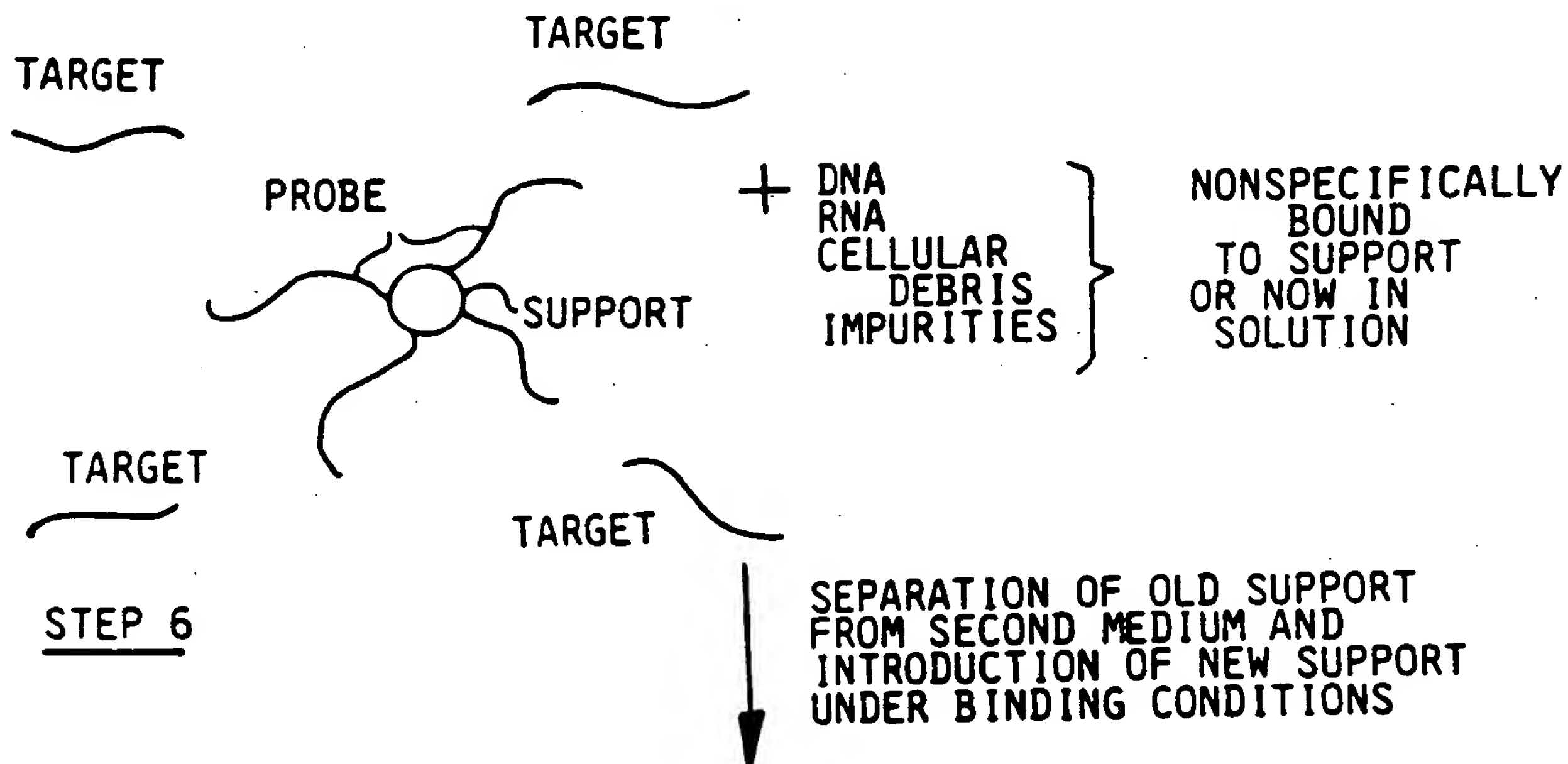
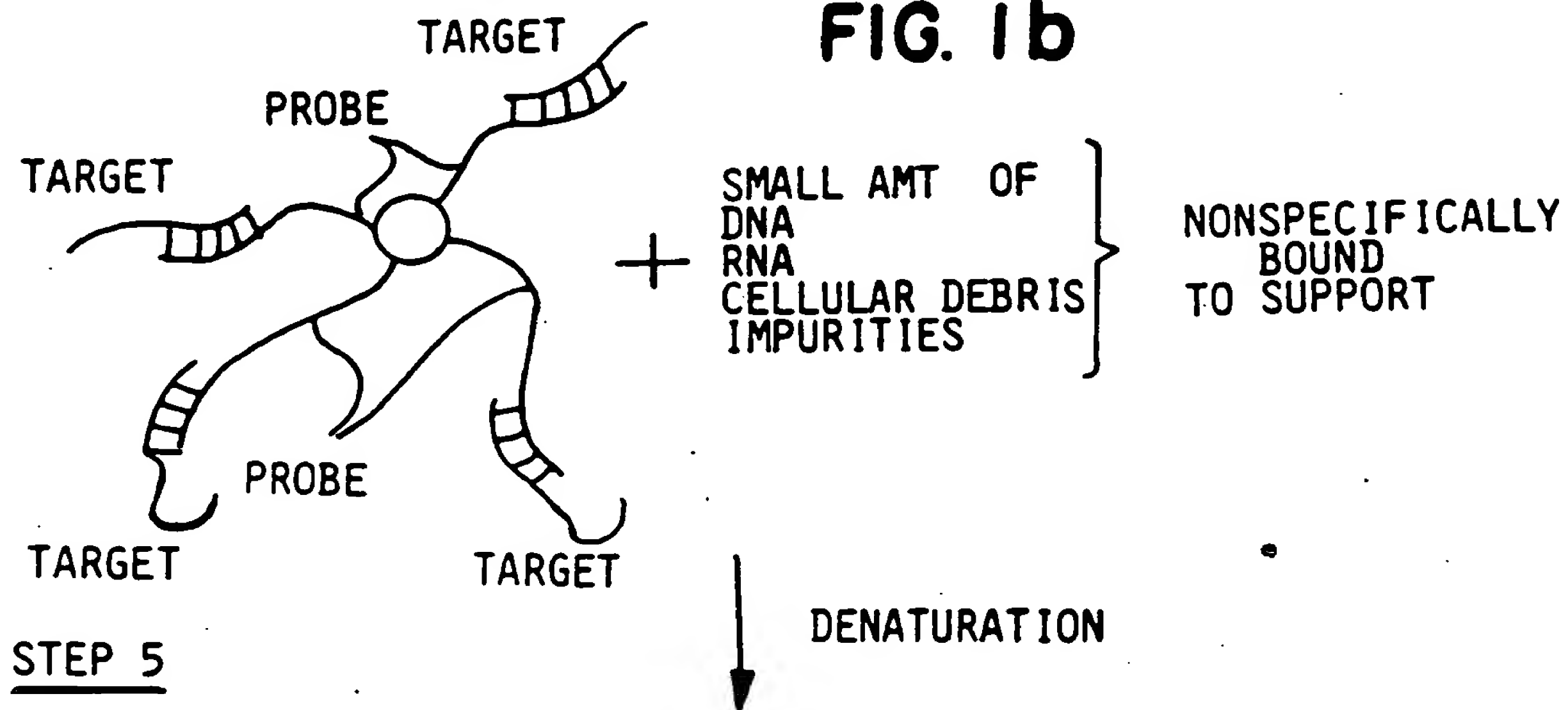


FIG. 1b

**STEP 8**

DETECT TARGET

FIG. 2a

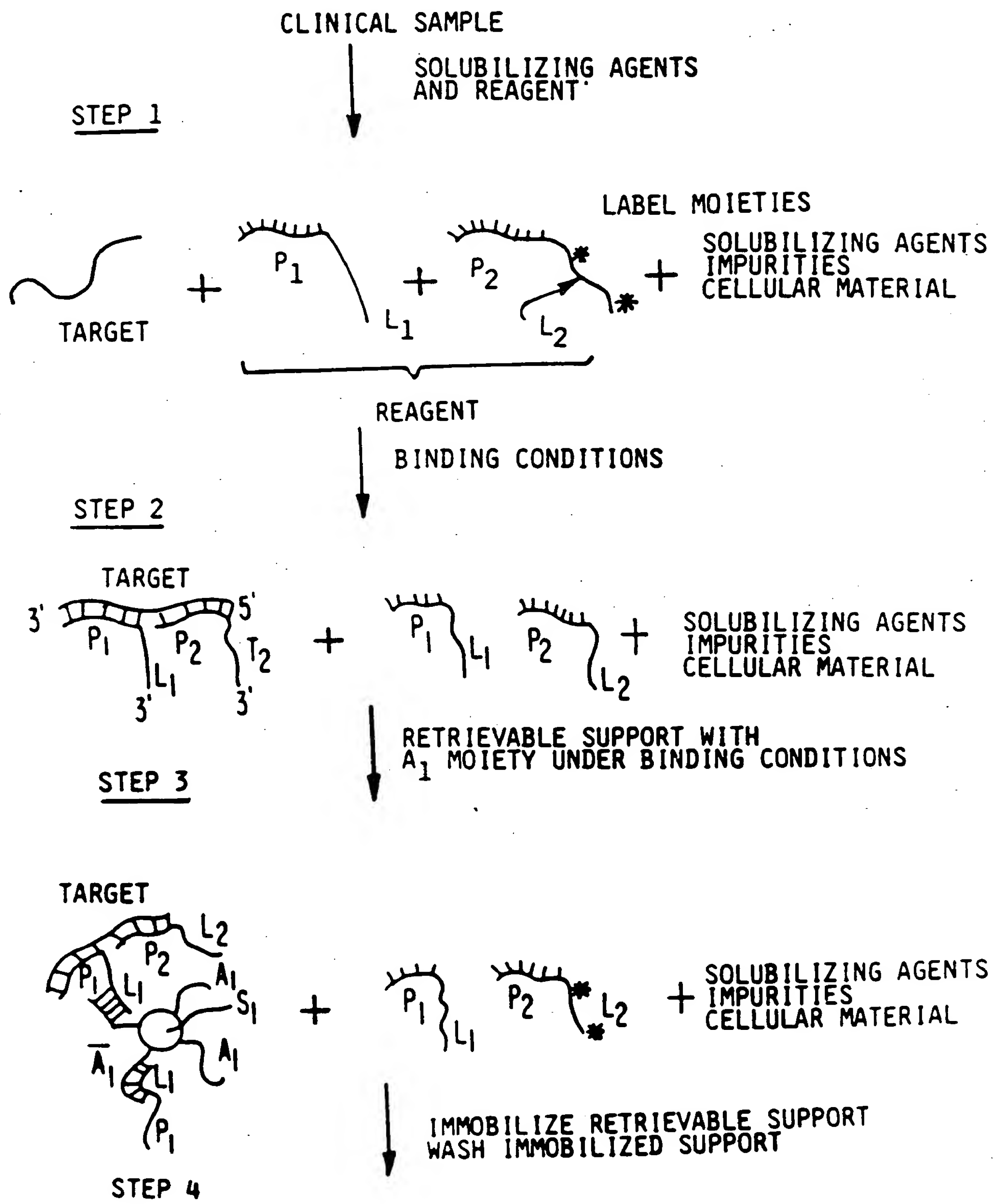


FIG. 2b

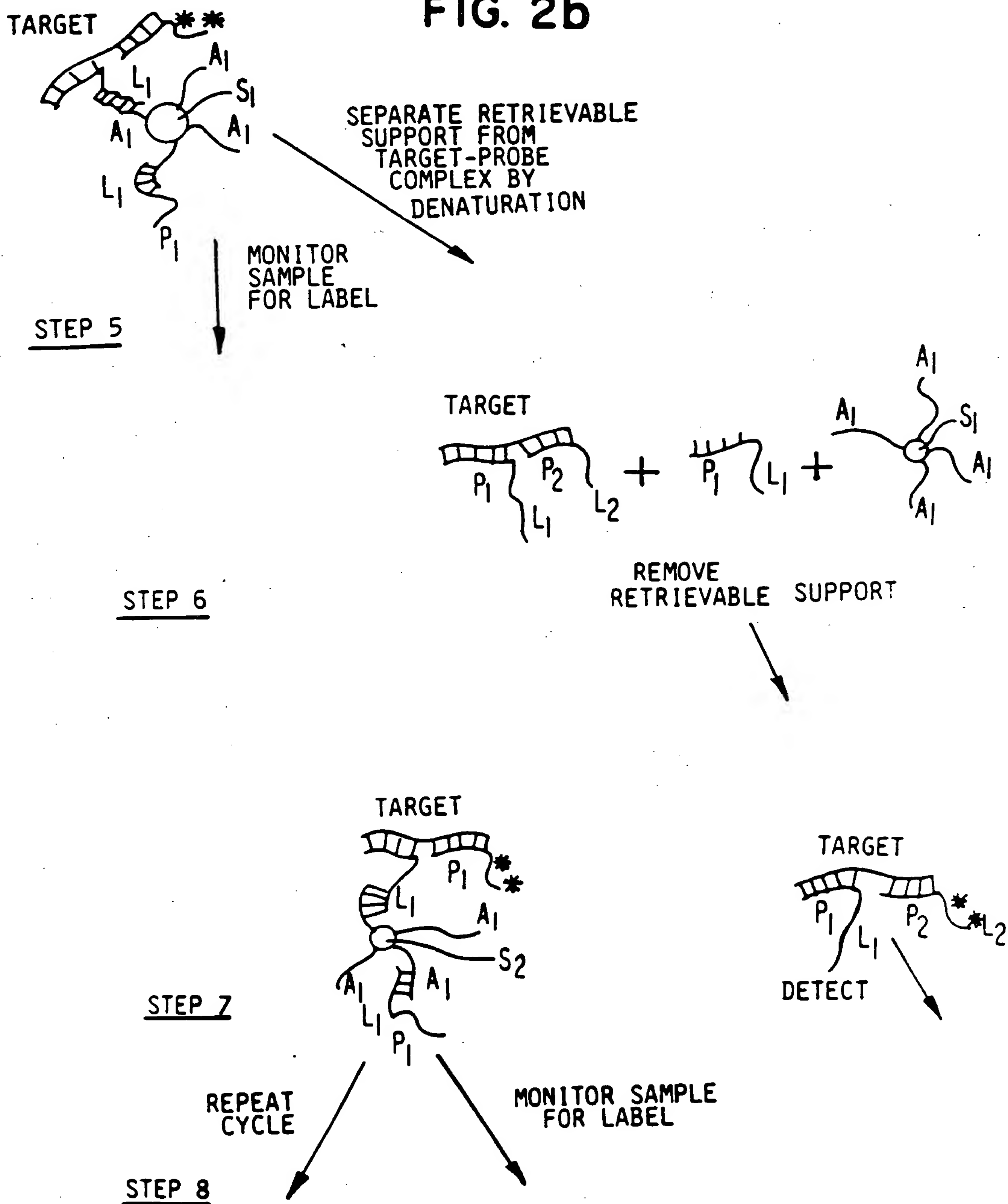
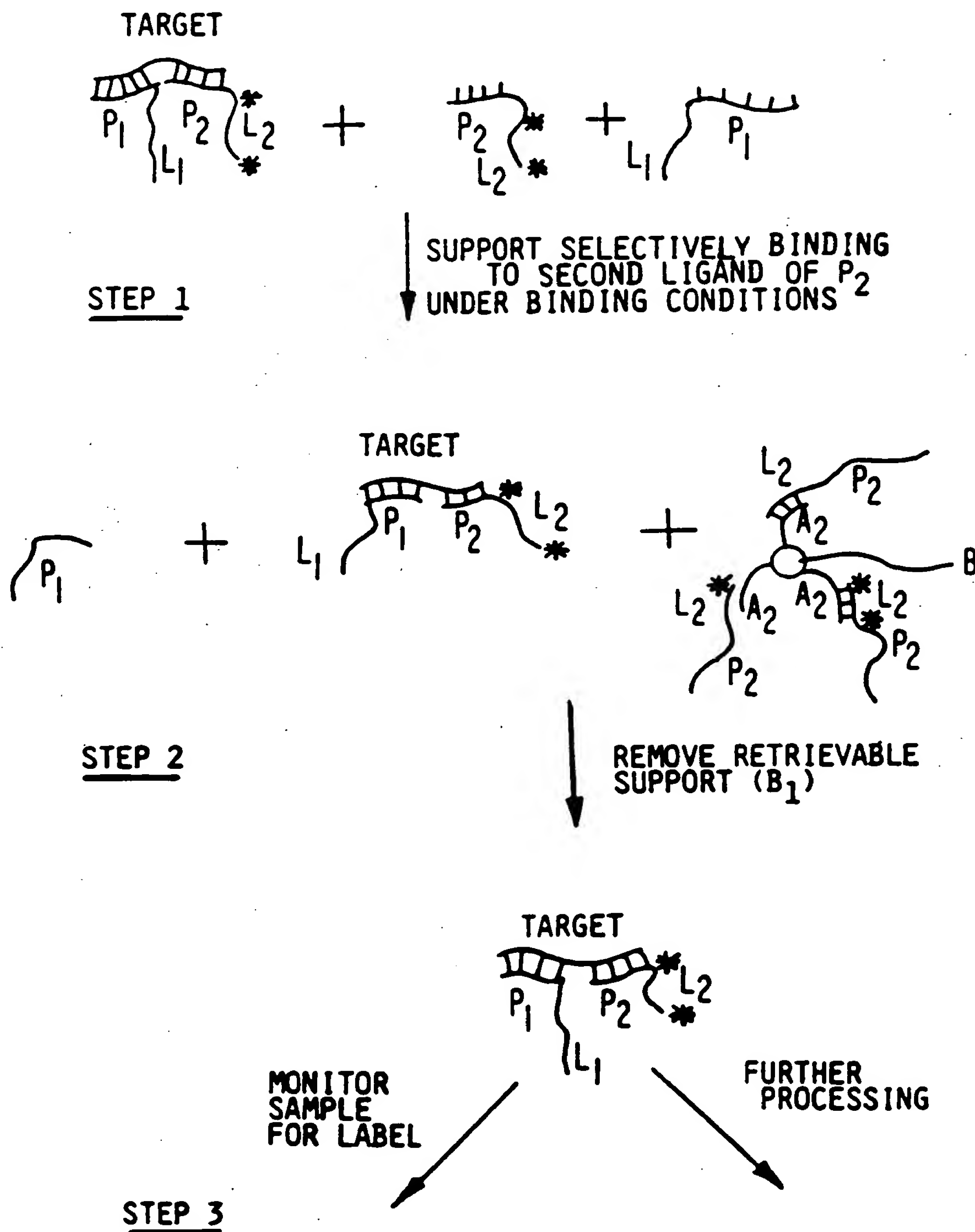


FIG. 3



Step 1

Target DNA in rough sample
capture probe (red protein)
capture bead
Binding conditions



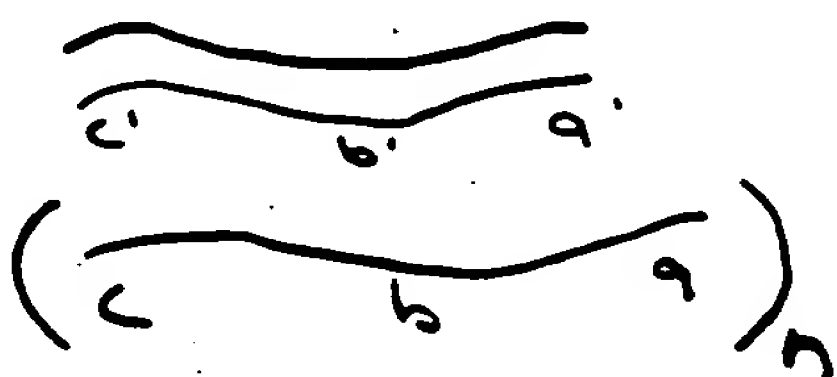
Step 2

isolate beads

target DNA (substantially free of sample
impurities, debris, extraneous
polynucleotides)

Step 3

core RNA polymerase
Low salt buffer



target DNA
RNA complementary to target DNA

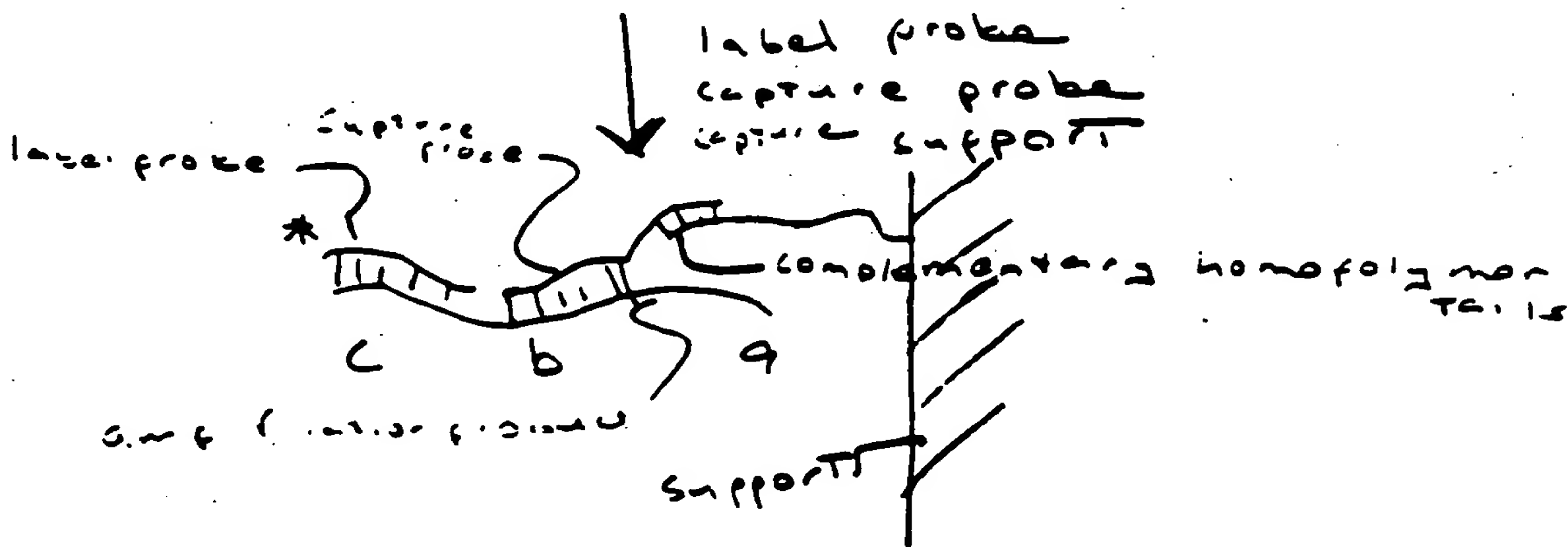


Fig 5

Target DNA in rough sample

00/238080

Step 1

capture probe
capture bead



Step 2

isolate beads

Target DNA (substantially free of sample impurities, debris, extraneous polynucleotides)

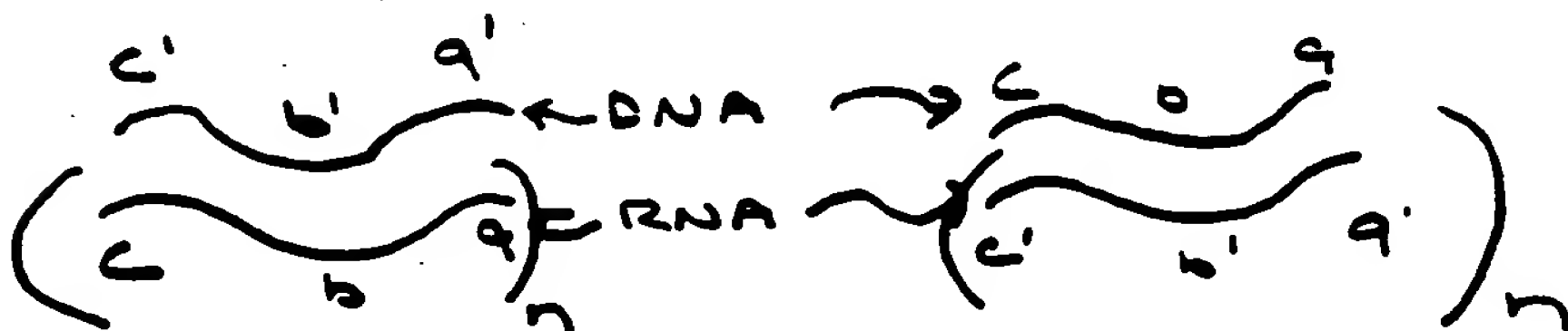
Step 3 a

DNA polymerase
hexamer primers



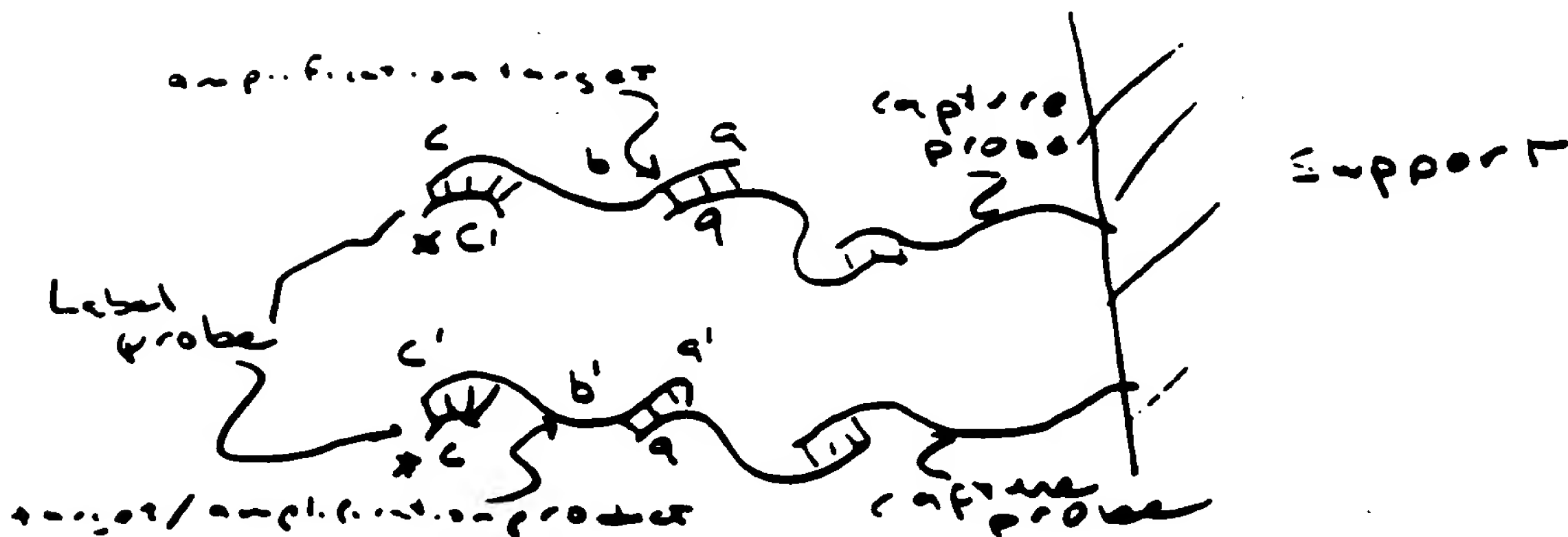
Step 3 b

core RNA polymerase
low salt buffer

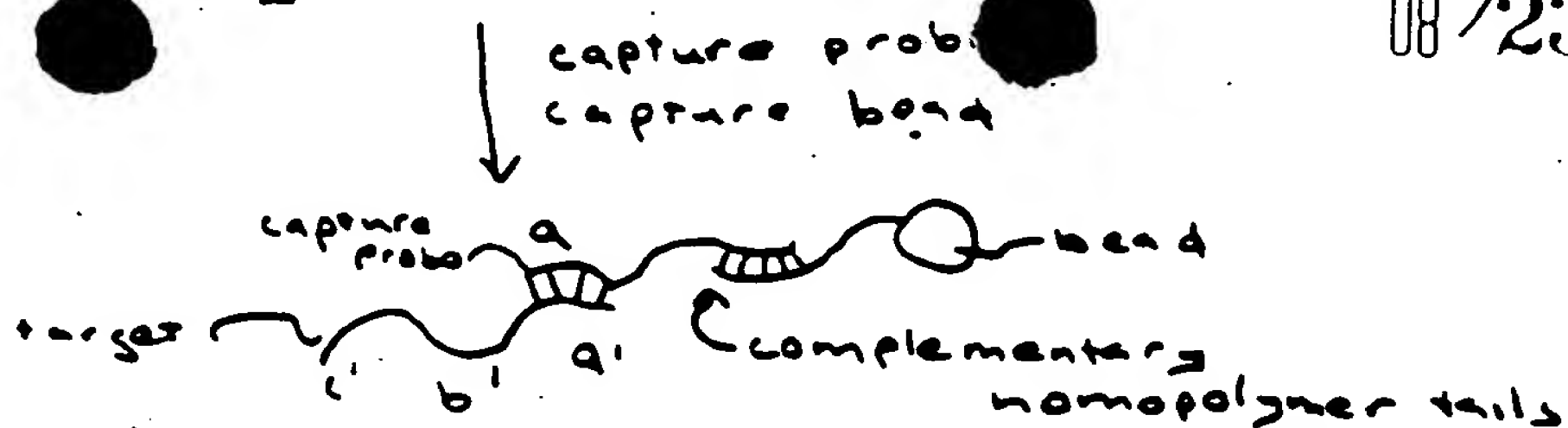


Step 4

labeled probe
capture probe
support



Step 1

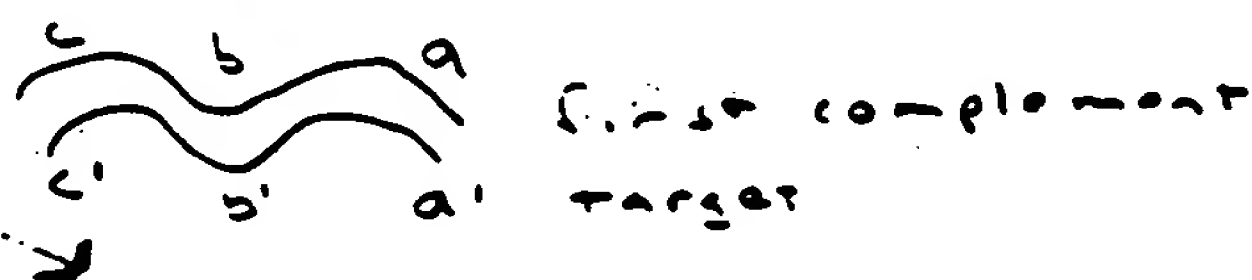


Step 2

isolate bead
Target DNA (substantially free of sample impurities, debris, and extraneous polynucleotides)

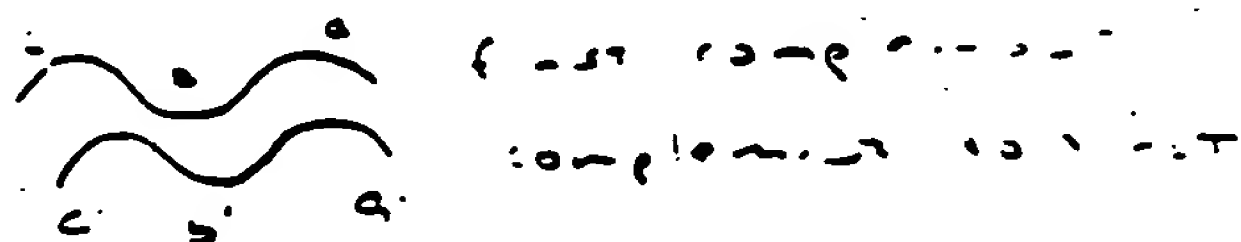
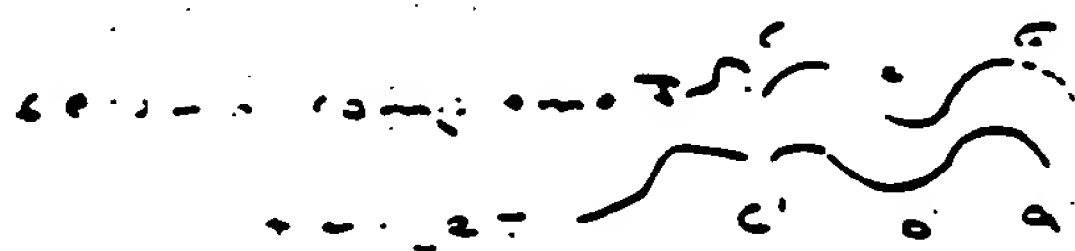
Step 3a

DNA polymerase
H... primer



Step 3b

1. denature
2. DNA polymerase



denature
label probe
capture support
capture probe

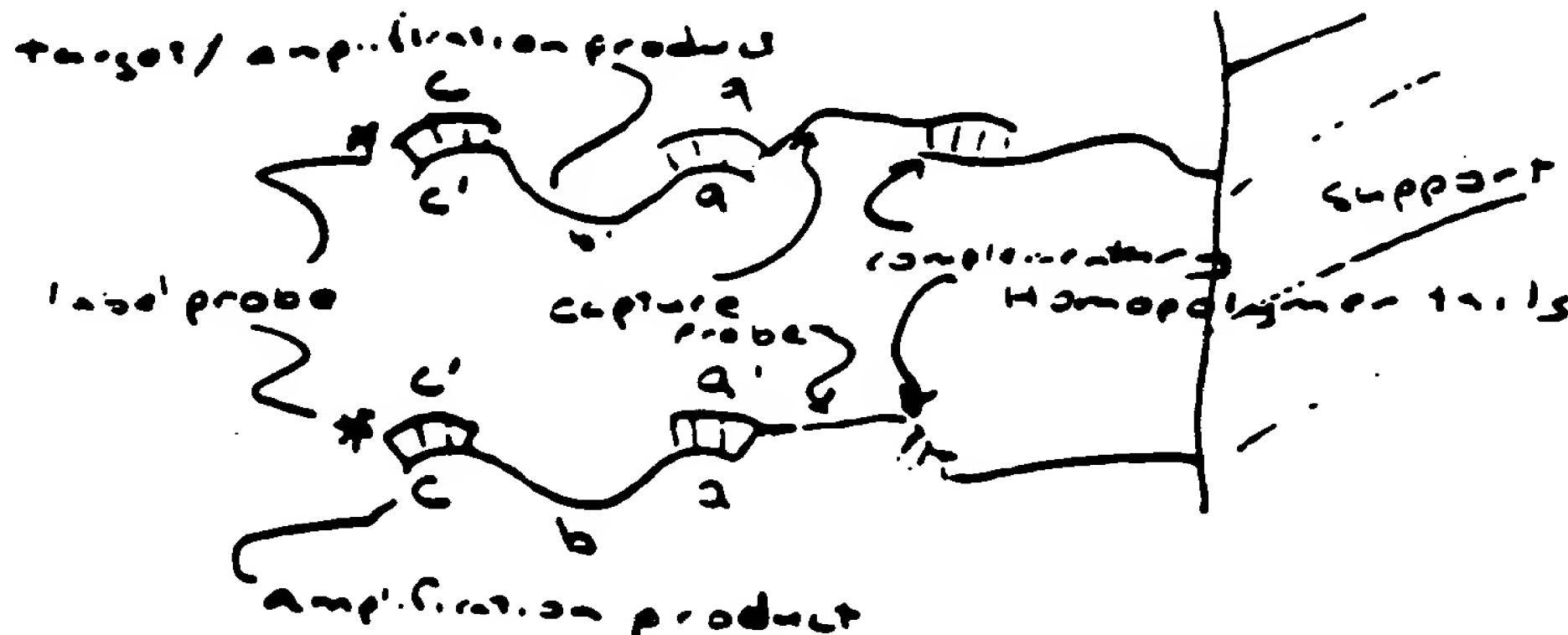
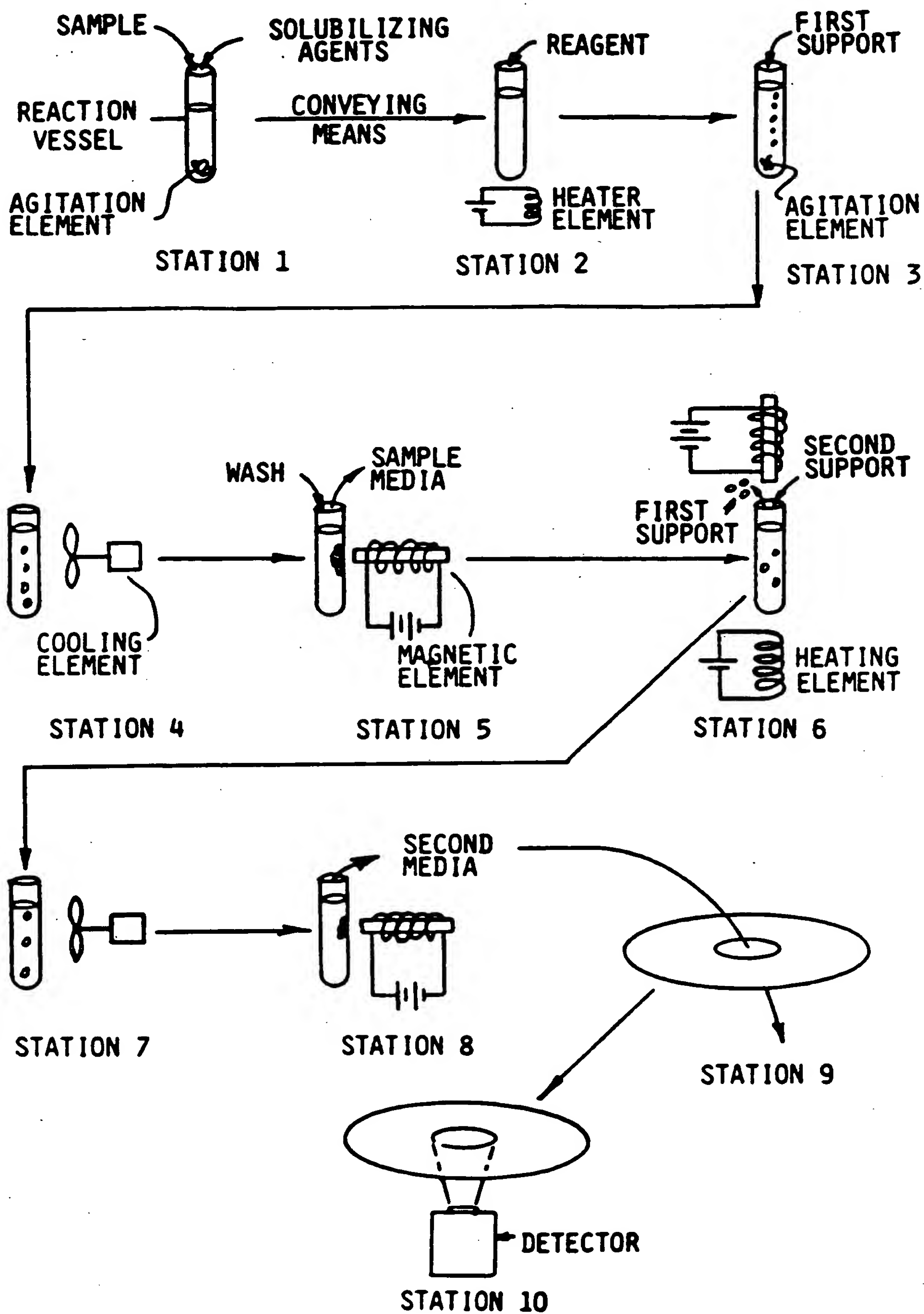
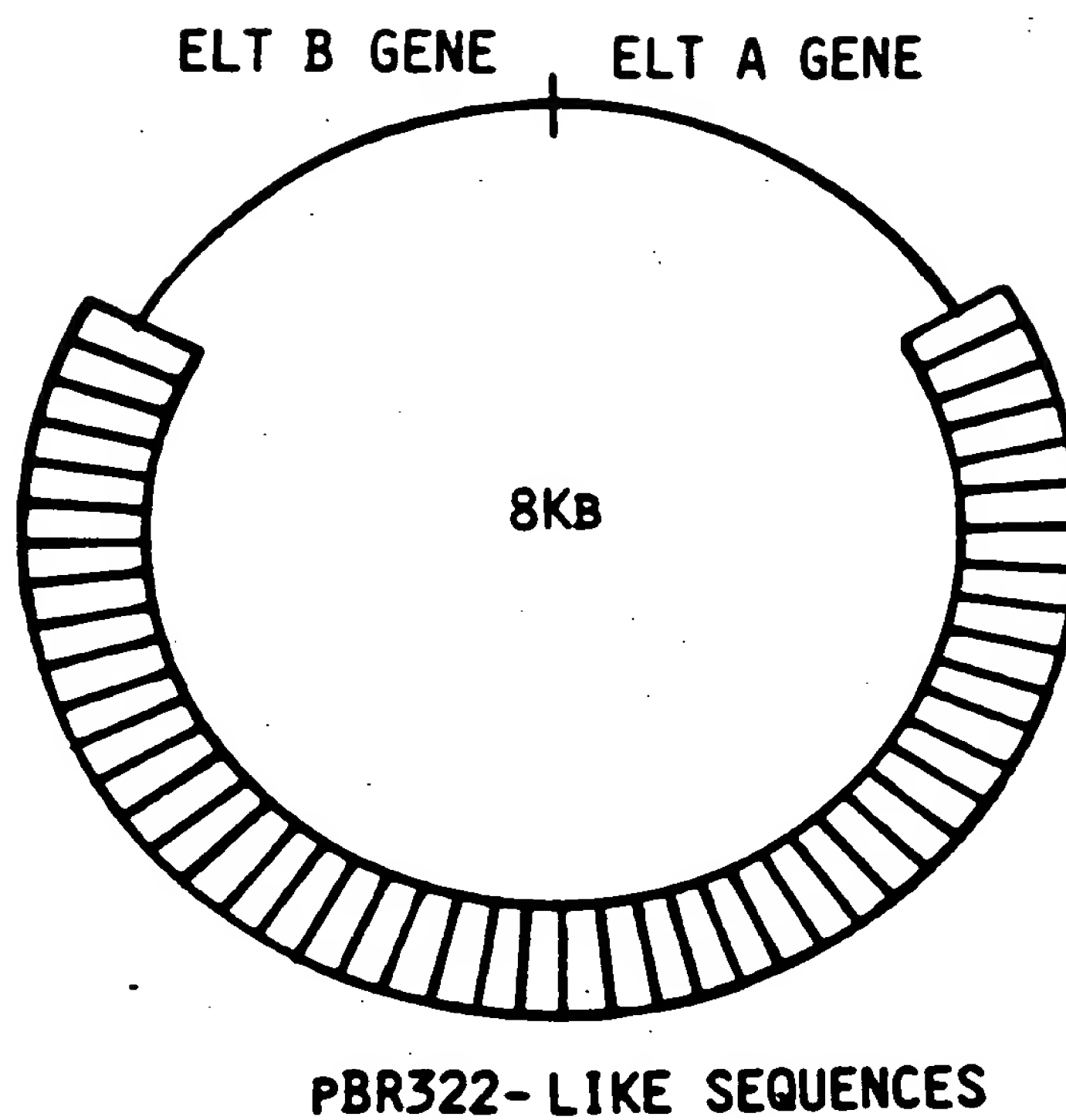


FIG. 7



**FIG. 8**